

Date: Tue, 19 Oct 93 04:30:16 PDT  
From: Ham-Ant Mailing List and Newsgroup <ham-ant@ucsd.edu>  
Errors-To: Ham-Ant-Errors@UCSD.Edu  
Reply-To: Ham-Ant@UCSD.Edu  
Precedence: Bulk  
Subject: Ham-Ant Digest V93 #83  
To: Ham-Ant

Ham-Ant Digest                      Tue, 19 Oct 93                      Volume 93 : Issue    83

Today's Topics:

End Fed Antenna Question

Send Replies or notes for publication to: <Ham-Ant@UCSD.Edu>  
Send subscription requests to: <Ham-Ant-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Ant Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-ant".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

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Date: Tue, 19 Oct 1993 00:51:48 GMT  
From: news.service.uci.edu!paris.ics.uci.edu!csulb.edu!library.ucla.edu!  
europa.eng.gtefsd.com!howland.reston.ans.net!math.ohio-state.edu!sdd.hp.com!  
col.hp.com!srngenprp!alanb@network.ucsd.edu  
Subject: End Fed Antenna Question  
To: ham-ant@ucsd.edu

Tom Bruhns (tomb@lsid.hp.com) wrote:

: Gregory S. Taylor (gtaylor@taex003n.tamu.edu) wrote:

: : Trying out the variation of a sleeve dipole where the sleeve is eliminated,  
: : allowing current to flow on outside of coax for 1/4 wavelength where there  
: : is coil and/or choke.

: : Anyway, this does not appear to be working for me using 3 turns of RG58x on  
: : 2 radio shack cores. At transmitter there is every appearance of current on

: Something I've done for choking like that is to wind an appropriate coil  
: with the coax and resonate that with a variable capacitor: wind the coil  
: air-core, perhaps on a piece of PVC pipe, remove some of the outer jacket  
: (bare the braid) at each end of the coil, and connect a variable cap  
: across the coil. Tune the cap for resonance.

That will work pretty well if the remaining coax to the shack is non-resonant. If not, then you have just invented the colinear antenna: a 1/2-wave dipole with a parallel resonant circuit (or tuning stub) connecting it to another 1/2-wave dipole. You will get lots of feedline current in that case.

: If you really want to  
: keep RF off the outside of the line further down, do something 1/4 wave  
: down from the first trap. You can put a second trap there, or put  
: radials out from the braid there. Be sure to seal any exposed  
: braid against the weather (good luck...).

Right, that's what you need to do to truly choke off the current.  
Adding the second trap 1/4 wavelength away forces the remaining feedline to be non-resonant.

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End of Ham-Ant Digest V93 #83  
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